INTERNATIONAL SEARCH REPORT

International Application No PCT/IB2004/050393 10/552805

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F9/50 G06F9/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NARLIKAR G J ET AL: "SPACE-EFFICIENT IMPLEMENTATION OF NESTED PARALLELISM" ACM SIGPLAN NOTICES, ASSOCIATION FOR COMPUTING MACHINERY, NEW YORK, US, vol. 32, no. 7, 1 July 1997 (1997-07-01), pages 25-36, XP000701966 ISSN: 0362-1340 First full paragraph of page 26, left-hand column Section 2 "Model of Parallelism" and first paragraph of section 3 on page 27 Paragraph bridging pages 27-28	1,3,4, 14-20
Y		2
A		5,6

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[X] Further documents are listed in the continuation of box C. [ ] Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
1 June 2005	30.08.05

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Ross, C

Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DATABASE INSPEC [Online] THE INSTITUTION OF ELECTRICAL ENGINEERS, STEVENAGE, GB; 2001, STREIT A: "On job scheduling for HPC-Clusters and the dynP scheduler" XP002329479 Database accession no. 7307055 abstract Section 5 "The dynP Scheduler": page 62 - page 63 -& PROCEEDINGS OF INTERNATIONAL IEEE CONFERENCE ON HIGH PERFORMANCE COMPUTING - INDIA 17-20 DEC. 2001 HYDERABAD, INDIA, 20 December 2001 (2001-12-20), pages 58-67, XP002329478 High Performance Computing - HiPC 2001. 8th International Conference. Proceedings (Lecture Notes in Computer Science Vol.2238) Springer-Verlag Berlin, Germany ISBN: 3-540-43009-1	2

Y	ENGELSCHALL R S: "pth GNU Portable Threads" PTH MANUAL, 17 February 2003 (2003-02-17), XP002315713 page 2, line 1 - line 12 Item "preemptive vs. non-preemptive thread scheduling": page 3 Items "int pth_suspend() and "int pth_yield()": page 10	1,3,4, 14-20

Y	JIMAN HONG ET AL: "On the choice of checkpoint interval using memory usage profile and adaptive time series analysis" DEPENDABLE COMPUTING, 2001. PROCEEDINGS. 2001 PACIFIC RIM INTERNATIONAL SYMPOSIUM ON SEOUL, SOUTH KOREA 17-19 DEC. 2001, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, 17 December 2001 (2001-12-17), pages 45-48, XP010585360 ISBN: 0-7695-1414-6 abstract First and last paragraphs of section 2 "Checkpoint based on memory usage profile...": page 45 - page 46; figure 1	1,3,4, 14-20

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International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-6, 14-20

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6, 14-20

Methods and computer program product for task scheduling based on memory usage. Scheduling scheme based on co-operative multitasking, where preemption points are specified in each task, typically at points in task with low memory usage.

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2. claims: 7-13

Devices and method steps for evaluating whether system has enough memory to process the offered load and subsequent selection and (preemptive) suspension of memory intensive tasks.
